

Claims

What is claimed is:

1. A method of capturing and distributing images of a patron in a venue, the method comprising the steps of:

5 capturing electronic visual images at the venue, in which the patron is represented in at least a subset of those images;

performing image analysis on the images in order to identify those images in which the patron is represented;

10 storing the captured electronic visual images in which the patron is represented in association with an electronic identifier of the patron;

retrieving for distribution visual images in which the patron is represented on the basis of the electronic identifier.

2. The method of claim 1, wherein the image analysis comprises facial recognition.

15 3. The method of claim 1, wherein the electronic identifier comprises information about facial characteristics of the patron.

4. The method of claim 1, wherein the step of image analysis utilizes non-permanent features of the patron selected from the group consisting of clothes colors, eyeglass presence, eyeglass colors, hair color, makeup color, jewelry, hat shape, hat color, and facial hair distribution.

20 5. The method of claim 4, wherein the electronic identifier includes information about the non-permanent features of the patron utilized in the step of image analysis.

6. The method of claim 1, wherein the step of image analysis utilizes the height of the patron.

7. The method of claim 1, wherein the step of image analysis utilizes the association of the patron with a second patron, in which the confidence that a patron is represented in a particular image is increased by the representation of the second patron in the same image.

25 8. A method of capturing and distributing images of a specific patron among many patrons in a venue, the method comprising the steps of:

capturing electronic visual images of many patrons at the venue, in which the specific patron is represented in at least a subset of those images;

30 performing image analysis on the captured images, resulting in a descriptor of at least one patron represented within each image, wherein the descriptor includes quantitative information about physical characteristics of the patron;

storing the captured electronic visual images in association with the quantitative descriptors of at least one patron represented within each image;

obtaining an electronic visual reference image of the specific patron;

35 performing a reference image analysis on the reference image, resulting in a quantitative descriptor of the specific patron;

retrieving for distribution visual images in which the patron is represented by comparing the descriptor of the specific patron with the descriptors associated with the stored images.

9. The method of claim 8, in which the image analysis comprises facial recognition.

10. The method of claim 9, in which the descriptors comprise principal components quantifiers.

5 11. The method of claim 8, in which the descriptors comprise information regarding non-permanent features of patrons selected from the group consisting of clothes colors, eyeglass presence, eyeglass colors, hair color, makeup color, jewelry, hat color, hat shape, and facial hair distribution.

10 12. The method of claim 8, including associating the specific patron with an associate patron, wherein representations of the specific patron and the associate patron are expected at greater than random frequency to be in the same image.

13. The method of claim 12, wherein the step of retrieving additionally comprises determining whether the representation of the specific patron is present in the same image as the representation of an associate patron.

14. The method of claim 12, wherein the representations of the associate patron is expected in greater than 10% of the images in which the representation of the specific patron occurs.

15 15. The method of claim 8, wherein the descriptor of the specific patron comprises information from descriptors from captured images containing a representation of the specific patron.

16. The method of claim 8, wherein the comparing comprises the computation of a confidence level that the specific patron is present in a stored image.

20 17. The method of claim 16, wherein the representation of the specific patron is determined to be in an image if the confidence level exceeds a predetermined threshold.

18. The method of claim 17, wherein if the confidence level is below the predetermined threshold, comparison of additional descriptors is performed that can result in an increase in the confidence level.

19. The method of claim 8, wherein the electronic visual reference image of the specific patron is obtained prior to the capturing of electronic visual images.

25 20. The method of claim 8, wherein the electronic visual reference image of the specific patron is obtained subsequent to the capturing of electronic visual images.

21. The method of claim 8, wherein the electronic visual reference image is obtained via an Internet transfer using a protocol selected from the group consisting of Simple Mail Transfer Protocol or Hypertext Transfer Protocol.

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